


gcs

MAR 9 2005

Accompanying this letter is a check for \$100.00 to cover the statutory fee for such Certificate of Correction. Any additional fee required by this paper may be charged to Deposit Account No. 06-1205. A duplicate of this paper is enclosed for that purpose.

Patentees' undersigned attorney may be reached in our Washington, D.C. Office by telephone at (202) 530-1010. All correspondence should continue to be directed to our below-listed address.

Respectfully submitted,


Attorney for Patentees
Steven E. Warner
Registration No. 33,326

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30 Rockefeller Plaza
New York, New York 10112-3801
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DC_MAIN 193079v1

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UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 6,829,099 B2

DATED : December 7, 2004

INVENTOR(S): Takashi KATO et al.

Page 1 of 9

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

COLUMN 2:

Line 14, "diffrative" should read -- diffractive --.

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Line 64, "including many" should read -- include a lens group of negative refractive power as well as many additional lenses. Further, the second imaging system should include many --.

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Line 4, " \varnothing_{0-} " should read -- v_{0-} --.

COLUMN 8:

Line 8, " $+\varnothing_{0-}/v_{0-}$ is" should read -- $+\varnothing_{0-}/v_{0-}$ --.

Line 11, "determines" should read -- determine --.

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In the chart under "Example 3," in column "di," the third entry down, "24.168" should read -- 24.160 --.

In the chart entitled "aspherical surfaces," in the upper level, under column "A," the seventh entry down, "1.356704e-008" should read -- 1.355704e-008 --; under column "C," the second entry down, "-6.075624e-016" should read -- -5.075624e-015 -- and the seventh entry down, "1.115481e-017" should read -- 3.115481e-017 --.

In the chart entitled "aspherical surfaces," in the lower level, under column "E," the sixth entry down, "-2.958951e-026" should read -- -2.958961e-026 -- and the eighth entry down, "7.981582e-024" should read -- 7.961582e-024 --.

COLUMN 27:

In the header row for the first table under "Example 4," "Obj-distance = 58.499" should read -- Obj-distance = 68.499 -- and under column "di," the twenty-first entry down "1.360" should read -- 3.360 --.

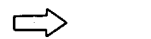
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COLUMN 27 (continued):

The chart entitled "aspherical surfaces" should be deleted and the following inserted therefor:

aspherical surfaces

i	K	A	B	C	D
1	0.000000e+000	-1.681866e-009	2.986153e-013	-5.223610e-019	2.824161e-021
3	0.000000e+000	6.458325e-009	-2.072192e-013	-3.342548e-018	-1.997125e-021
6	0.000000e+000	2.854928e-009	2.852185e-015	1.944709e-019	1.479079e-023
7	0.000000e+000	5.949273e-009	1.353698e-013	2.886980e-018	2.989787e-022
9	0.000000e+000	-7.761800e-012	6.197164e-015	1.092259e-019	1.709278e-023
11	0.000000e+000	5.949273e-009	1.353698e-013	2.886980e-018	2.989787e-022
12	0.000000e+000	2.854928e-009	2.852185e-015	1.944709e-019	1.479079e-023
15	0.000000e+000	-5.267907e-009	1.973015e-014	2.604847e-019	6.885808e-024
22	-3.224506e+000	-8.390881e-009	-4.384285e-013	-1.210442e-018	-1.082590e-022
24	0.000000e+000	-7.333591e-009	2.665449e-013	-6.665404e-019	-3.588634e-022
26	0.000000e+000	-3.629113e-008	-1.388388e-012	-1.440922e-018	2.053203e-020

i	E	F	G
1	-3.736212e-025	2.009467e-029	0.000000e+000
3	2.872877e-025	-1.766891e-029	0.000000e+000
6	2.402849e-028	-5.549594e-032	0.000000e+000
7	-1.486784e-026	5.643220e-031	0.000000e+000
9	-5.671144e-028	2.416267e-032	0.000000e+000
11	-1.486784e-026	5.643220e-031	0.000000e+000
12	2.402849e-028	-5.549594e-032	0.000000e+000
15	3.538947e-028	-2.714266e-032	0.000000e+000
22	2.100909e-027	-9.830355e-032	0.000000e+000
24	1.160342e-026	-2.641121e-031	0.000000e+000
26	-2.539599e-024	1.018509e-028	0.000000e+000

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COLUMN 27 (continued):

In "Example 5," under column "di," the first-listed entry, "26.576" should read -- 25.576 --.

COLUMN 29:

In the top-most chart, in line "6," "477.676" should read -- 477.675 -- and in line "12," "75.388" should read -- 75.386 --.

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COLUMN 29 (continued):

The charts entitled "aspherical surfaces" and "HOE surfaces" should be deleted and the following inserted therefor:

aspherical surfaces

i	K	A	B	C	D
4	0.000000e+000	7.291534e-008	1.535404e-013	-4.370275e-017	9.876687e-021
5	0.000000e+000	2.289506e-007	8.894123e-011	8.536915e-015	-5.523997e-017
6	0.000000e+000	-3.188788e-010	1.064840e-013	-2.885073e-017	7.084915e-021
9	0.000000e+000	1.903894e-008	-2.320265e-013	1.279193e-016	-4.086828e-020
18	0.000000e+000	1.342639e-008	-5.073137e-013	1.872925e-016	-1.050483e-020
20	0.000000e+000	2.305267e-008	1.672101e-011	-1.060029e-015	4.230949e-020
22	0.000000e+000	-8.862686e-008	-3.792881e-011	-4.648849e-015	-8.831508e-019

i	E	F	G
4	-1.058492e-024	4.868297e-029	0.000000e+000
5	2.248477e-020	6.628838e-024	0.000000e+000
6	-1.347591e-024	1.040897e-028	0.000000e+000
9	6.899515e-024	-4.445103e-028	0.000000e+000
18	-4.135322e-024	3.704107e-028	0.000000e+000
20	-1.206693e-024	-1.271080e-028	0.000000e+000
22	6.124698e-023	-2.733653e-027	0.000000e+000

HOE surfaces

i	C1	C2	C3	C4	C5
13	9.272146e-004	-2.752225e-008	-2.193748e-013	9.832534e-018	2.954594e-021
17	7.020836e-004	-2.861061e-009	-1.044493e-012	-1.326484e-016	1.316201e-021
i	C6	C7	C8		
13	-4.151596e-025	2.213188e-029	0.000000e+000		
17	2.493462e-024	-2.158400e-028	0.000000e+000		

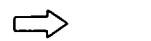
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Line 63, "optical" should read -- optical system --.

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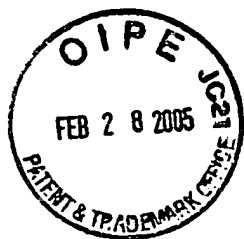
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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent of:)	
	:	
Takashi KATO et al.)	Examiner: A. V. Amari
	:	
Application No.: 09/820,710)	Group Art Unit: 2872
	:	
Filed: March 30, 2001)	
	:	
For: PROJECTION OPTICAL SYSTEM AND PROJECTION EXPOSURE APPARATUS)	February 28, 2005
	:	
U.S. Patent No. 6,829,099 B2)	
	:	
Issued: December 7, 2004)	
	:	

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450
Attention: Certificate of Correction Branch

REQUEST FOR
CERTIFICATE OF CORRECTION
UNDER RULES 322 AND 323

Sir:

Patentees request that a Certificate of Correction be issued by the Patent and Trademark Office due to errors which appear in the printed patent as a result of Patent and Trademark Office mistakes and mistakes of a minor nature which are not the fault of the Patent and Trademark Office. A Certificate of Correction form, in duplicate, is enclosed.

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Respectfully submitted,

A handwritten signature in black ink, appearing to read "Steven E. Warner", written over a horizontal line.

Attorney for Patentees
Steven E. Warner
Registration No. 33,326

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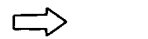
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In the chart under "Example 3," in column "di," the third entry down, "24.168" should read -- 24.160 --.

In the chart entitled "aspherical surfaces," in the upper level, under column "A," the seventh entry down, "1.356704e-008" should read -- 1.355704e-008 --; under column "C," the second entry down, "-6.075624e-016" should read -- -5.075624e-015 -- and the seventh entry down, "1.115481e-017" should read -- 3.115481e-017 --.

In the chart entitled "aspherical surfaces," in the lower level, under column "E," the sixth entry down, "-2.958951e-026" should read -- -2.958961e-026 -- and the eighth entry down, "7.981582e-024" should read -- 7.961582e-024 --.

COLUMN 27:

In the header row for the first table under "Example 4," "Obj-distance = 58.499" should read -- Obj-distance = 68.499 -- and under column "di," the twenty-first entry down "1.360" should read -- 3.360 --.

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PATENT NO. : 6,829,099 B2

DATED : December 7, 2004

INVENTOR(S) Takashi KATO et al.

Page 6 of 9

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

COLUMN 27 (continued):

The chart entitled "aspherical surfaces" should be deleted and the following inserted therefor:

aspherical surfaces

i	K	A	B	C	D
1	0.000000e+000	-1.681866e-009	2.986153e-013	-5.223610e-019	2.824161e-021
3	0.000000e+000	6.458325e-009	-2.072192e-013	-3.342548e-018	-1.997125e-021
6	0.000000e+000	2.854928e-009	2.852185e-015	1.944709e-019	1.479079e-023
7	0.000000e+000	5.949273e-009	1.353698e-013	2.886980e-018	2.989787e-022
9	0.000000e+000	-7.761800e-012	6.197164e-015	1.092259e-019	1.709278e-023
11	0.000000e+000	5.949273e-009	1.353698e-013	2.886980e-018	2.989787e-022
12	0.000000e+000	2.854928e-009	2.852185e-015	1.944709e-019	1.479079e-023
15	0.000000e+000	-5.267907e-009	1.973015e-014	2.604847e-019	6.885808e-024
22	-3.224506e+000	-8.390881e-009	-4.384285e-013	-1.210442e-018	-1.082590e-022
24	0.000000e+000	-7.333591e-009	2.665449e-013	-6.665404e-019	-3.588834e-022
26	0.000000e+000	-3.629113e-008	-1.388388e-012	-1.440922e-018	2.053203e-020

i	E	F	G
1	-3.736212e-025	2.009467e-029	0.000000e+000
3	2.872877e-025	-1.766891e-029	0.000000e+000
6	2.402849e-028	-5.549594e-032	0.000000e+000
7	-1.486784e-026	5.643220e-031	0.000000e+000
9	-5.671144e-028	2.416267e-032	0.000000e+000
11	-1.486784e-026	5.643220e-031	0.000000e+000
12	2.402849e-028	-5.549594e-032	0.000000e+000
15	3.538947e-028	-2.714266e-032	0.000000e+000
22	2.100909e-027	-9.830355e-032	0.000000e+000
24	1.160342e-026	-2.641121e-031	0.000000e+000
26	-2.539599e-024	1.018509e-028	0.000000e+000

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

COLUMN 27 (continued):

In "Example 5," under column "di," the first-listed entry, "26.576" should read -- 25.576 --.

COLUMN 29:

In the top-most chart, in line "6," "477.676" should read -- 477.675 -- and in line "12," "75.388" should read -- 75.386 --.

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DATED : December 7, 2004

INVENTOR(S): Takashi KATO et al.

Page 8 of 9

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

COLUMN 29 (continued):

The charts entitled "aspherical surfaces" and "HOE surfaces" should be deleted and the following inserted therefor:

aspherical surfaces

i	M	A	B	C	D
4	0.000000e+000	7.281534e-008	1.535404e-013	-4.370276e-017	9.876587e-021
5	0.000000e+000	2.289506e-007	8.894123e-011	8.536915e-015	-5.523997e-017
6	0.000000e+000	-3.188788e-010	1.064840e-013	-2.885073e-017	7.084915e-021
9	0.000000e+000	1.903894e-008	-2.320265e-013	1.279193e-016	-4.086828e-020
18	0.000000e+000	1.842638e-008	-5.073137e-013	1.872926e-016	-1.050483e-020
20	0.000000e+000	2.306267e-008	1.672101e-011	-1.060029e-015	4.230848e-020
22	0.000000e+000	-8.862686e-008	-3.792881e-011	-4.848849e-015	-8.831508e-019

i	E	F	G
4	-1.058492e-024	4.868297e-029	0.000000e+000
5	2.248477e-020	6.628638e-024	0.000000e+000
6	-1.347591e-024	1.040897e-028	0.000000e+000
9	6.898515e-024	-4.445103e-028	0.000000e+000
18	-4.135322e-024	3.704107e-028	0.000000e+000
20	-1.206693e-024	-1.271080e-028	0.000000e+000
22	6.124698e-023	-2.733653e-027	0.000000e+000

HOE surfaces

i	C1	C2	C3	C4	C5
13	9.272146e-004	-3.762225e-008	-2.193748e-013	9.832534e-018	2.954594e-021
17	7.020836e-004	-2.861061e-009	-1.044493e-012	-1.326484e-016	1.885201e-021
i	C6	C7	C8		
13	-4.151596e-025	2.213188e-029	0.000000e+000		
17	2.493462e-024	-2.158400e-028	0.000000e+000		

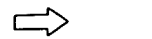
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INVENTOR(S): Takashi KATO et al.

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

COLUMN 31:

Line 63, "optical" should read -- optical system --.

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